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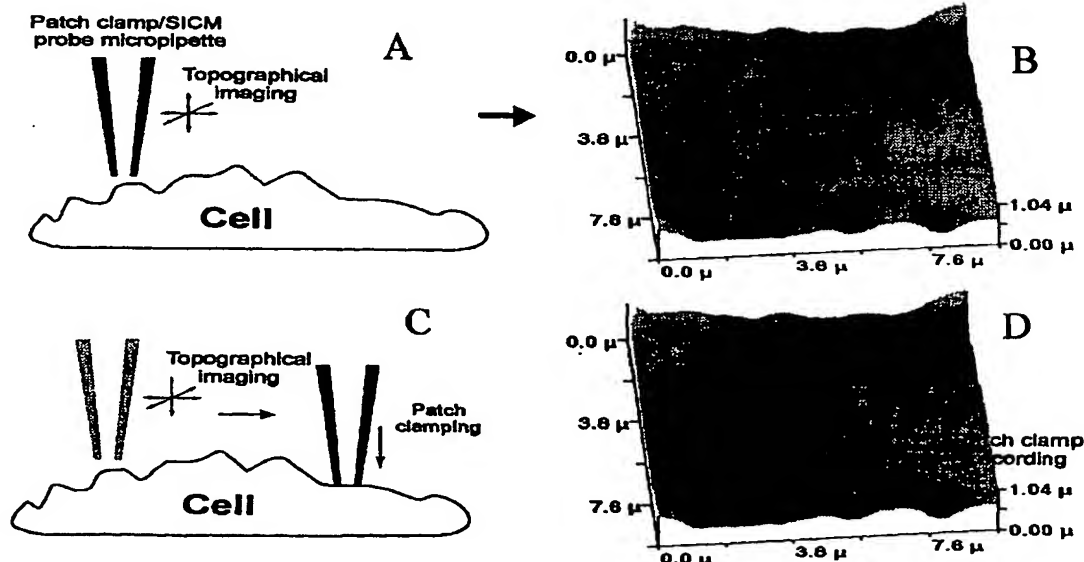
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- (54) Title: PATCH-CLAMPING AND ITS USE IN ANALYSING SUBCELLULAR FEATURES
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(57) Abstract: A method investigating a cell, comprises bringing a probe close to the surface of the cell or a part thereof, at a controlled distance therefrom; and into contact with the surface, essentially normal to the surface, to achieve patch-clamping.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 02/01382

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC 7 G01N33/487 G01N21/00 G02B21/00  |   |  |
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| According to International Patent Classification (IPC) or to both national classification and IPC   |   |  |
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC 7 G01N G02B   |   |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |   |  |
| Electronic data base consulted during the International search (name of data base and, where practical, search terms used)<br>EPO-Internal, INSPEC, PAJ, WPI Data, BIOSIS   |   |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>   |   |  |
| Category *  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.                              |
| X   | KORCHEV Y E ET AL: "SPECIALIZED SCANNING<br>ION-CONDUCTANCE MICROSCOPE FOR IMAGING OF<br>LIVING CELLS"<br>JOURNAL OF MICROSCOPY, OXFORD, GB,<br>vol. 188, no. PART 1, 1997, pages 17-23,<br>XP000913863<br>ISSN: 0022-2720<br>page 17, left-hand column, paragraph 1<br>page 17, right-hand column, paragraph 3<br>page 18, right-hand column, paragraph 2<br>-page 19, line 2; figure 2<br>page 23, left-hand column, paragraph 1<br>--- | 1-13   |
| X   | WO 00 63736 A (IMP COLLEGE INNOVATIONS LTD<br>;KLENERMAN DAVID (GB); KORCHEV YURI EV)<br>26 October 2000 (2000-10-26)<br>page 9, line 20 - line 26; figure 3<br>---<br>-/---  | 1,11-13  |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.   |   |  |
| * Special categories of cited documents :<br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier document but published on or after the International filing date<br>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the International filing date but later than the priority date claimed<br>"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention<br>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone<br>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.<br>"&" document member of the same patent family |   |  |
| Date of the actual completion of the International search   |   | Date of mailing of the International search report |
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| Name and mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016  |   | Authorized officer<br><br>Savage, J                |

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | KORCHEV Y E ET AL: "SCANNING ION<br>CONDUCTANCE MICROSCOPY OF LIVING CELLS"<br>BIOPHYSICAL JOURNAL, NEW YORK, US; US,<br>vol. 73, no. 1, August 1997 (1997-08),<br>pages 653-658, XP000913877<br>ISSN: 0006-3495<br>cited in the application<br>the whole document | 1-13                  |
| A          | PATENT ABSTRACTS OF JAPAN<br>vol. 1997, no. 11,<br>28 November 1997 (1997-11-28)<br>& JP 09 196936 A (BUNSHI BIO PHOTONICS<br>KENKYUSHO:KK), 31 July 1997 (1997-07-31)<br>abstract   | 1-13                  |
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| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s)                     | Publication<br>date                    |
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| JP 09211010                               | A | 15-08-1997          | NONE   |  |

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